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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,432	09/04/2003	Hironori Okado	116710	5222
25944	7590	11/02/2004	EXAMINER	
OLIFF & BERRIDGE, PLC			A, MINH D	
P.O. BOX 19928			ART UNIT	
ALEXANDRIA, VA 22320			PAPER NUMBER	
			2821	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/654,432

**Applicant(s)**

OKADO, HIRONORI

**Examiner**

Minh D A

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13 and 16 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/4/03, 10/17/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 8-13 and 16 are rejected under 35 U.S.C. 102(e) as being unpatentable by Tomomatsu et al (US 6,720,924).

Regarding claim 1, Tomomatsu discloses an antenna, comprising: a ground pattern (18); and a planar element (12) that has a feed point (26) and a cut-out portion formed at an edge portion (32) being opposite to the ground pattern (18) side of said planar element (12), and wherein said ground pattern(18) and said planar element(12) are juxtaposed with each other extending along counter directions respectively. See figures 1A-2B, col.3, lines

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29-67 to col.4, lines 1-4 and figures 17A-17B, col.9, lines 27-67 to col.10, lines 1-40 for more explain or disclose more detail.

Regarding claim 2, Tomomatsu discloses wherein said planar element (12) is disposed so that said edge portion other than said cut-out portion of said planar element (12) is opposite to said ground pattern (18). See figures 1A-2B.

Regarding claim 3, Tomomatsu discloses an antenna as is formed without fully surrounding said edge element, said ground pattern (18) portion of said planar. See figures 1A-2B.

Regarding claim 4, Tomomatsu discloses a cut out portion (32) has a rectangular shape. See figure 17A-17B, col.9, lines 26-46.

Regarding claim 5, Tomomatsu discloses wherein said cut-out portion (32) is formed symmetrically with respect to a line passing through said feed point (26). See figures 1A-2B and 17A-17B.

Regarding claim 8, Tomomatsu discloses wherein at least one of said planar element (12) and said ground pattern (18) has a portion that causes to continuously vary a distance there-between. See figures 1A-2B and 17A-17B

Regarding claim 9, Tomomatsu discloses wherein said planar element (12) said edge portion is curved. See figures 1A-2B and 17A-17B.

Regarding claim 10, Tomomatsu discloses wherein said planar element (12) formed on a dielectric substrate(16). See figures 1A-1B.

Regarding claim 11, Tomomatsu discloses an antenna dielectric substrate (16), comprising: a layer formed dielectric material; and a layer containing a conductor (22) having a cut-out portion (32) formed from an edge portion nearest

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to a first side surface of said antenna dielectric substrate (16) toward a second side surface opposite to said first side surface. See figures 1A-2B, col.3, lines 29-67 to col.4, lines 1-4 and figures 17A-17B, col.9, lines 27-67 to col.10, lines 1-40 for more explain or disclose more detail.

Regarding claim 12, Tomomatsu discloses a dielectric substrate (16) having the cut-out portion rectangular shape (32). See figures 17A-17B, col.9, lines 27-67 to col.10, lines 1-40.

Regarding claim 13, Tomomatsu discloses wherein said cut-out portion (32) is formed symmetrically with respect to a line passing through a feed point (26) of said conductor (22). See figures 1A-2B and 17A-17B.

Regarding claim 16, Tomomatsu discloses wherein an edge portion of said conductor (22), which is nearest to said second side surface, has a portion that continuously varies a distance with said second side surface. See figures 1A-2B and 17A-17B.

### ***Allowable Subject Matter***

2. Claims 6-7 and 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, wherein said planar element (12) has such a shape that a bottom side thereof is adjacent to the ground pattern (18), lateral sides thereof is provided vertically or substantially vertically to said bottom

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side and said cut-out portion is provided in a top side thereof recited in dependent claims 6-7 and 14-15.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grangeat et al (US 6,133,879) and McCorkle. (US 6,351,246) are cited to show an antenna apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

Examiner

Minh A

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10/26/04



THUY V. TRAN  
PRIMARY EXAMINER